

AMENDMENTS TO THE CLAIMS

1. (previously presented) A process for the preparation of ammonia comprising the steps of:

contacting an ammonia synthesis gas with an ammonia synthesis catalyst arranged as a reaction zone in one or more catalyst tubes;

cooling the reaction zone by a heat conducting relationship with a cooling agent; and

withdrawing an ammonia rich effluent stream from the reaction zone;

wherein the cooling agent is selected from the group consisting of metals having a melting point below the temperature in the reaction zone, and wherein the cooling agent is circulated within cooling tubes, each cooling tube concentrically surrounding one of said catalyst tubes.

2. (original) The process of claim 1, wherein the ammonia synthesis gas is contacted with the ammonia synthesis gas arranged in two or more reaction zones with intermediate withdrawal of an ammonia rich effluent stream between the reaction zones.

3. (previously presented) The process of claim 1, wherein the ammonia rich effluent stream is separated into a stream of unconverted ammonia synthesis gas and an ammonia product stream, the unconverted ammonia synthesis gas is recycled to the reaction zone.

4. (previously presented) The process of claim 2, wherein the separation is obtained by cooling of the effluent stream and condensation of ammonia.

5. (previously presented) The process of claim 2, wherein the separation is obtained by adsorption of ammonia contained in the effluent stream.

6 – 11. (canceled)